

**ELECTRONIC HANDHELD AUDIO/VIDEO RECEIVER AND
LISTENING/VIEWING DEVICE**

CROSS REFERENCE TO RELATED APPLICATION

This document is a continuation-in-part and claims priority to: (1) copending non-provisional U.S. patent application entitled “Video/Audio System and Method Enabling a User to Select Different Views and Sounds Associated With an Event,” assigned serial number 09/322,411, and filed May 28, 1999; (2) copending non-provisional U.S. patent application 10 entitled “Audio/Video System and Method Utilizing a Head Mounted Apparatus With Noise Attenuation,” assigned serial number 09/386,613, and filed August, 31, 1999, both of which are incorporated herein by reference. This document also claims priority to and the benefit of the filing date of the copending provisional application “Electronic Handheld Video Receiver and Viewing Device,” assigned serial number 60/240,129, and filed October 13, 2000, which is 15 incorporated herein by reference.

BACKGROUND OF THE INVENTION

FIELD OF THE INVENTION

20 The present invention generally relates to an apparatus for processing video and/or audio signals and for displaying images and producing sounds based on the processed video and/or audio signals.

RELATED ART

Audio and video signals are generated from a plurality of sources during many events.

An “event” is any occurrence viewed by a spectator. For example, at a football game or other type of sporting event, television crews usually position cameras and microphones at various 5 locations in the stadium. As used herein, “stadium” shall be defined to mean any non-movable structure having a large number (*i.e.*, thousands) of seats, wherein an event occurs at (*i.e.*, within a close proximity of) the seats such that spectators sitting in the seats can view and hear the event. These crews generate audio and video signals defining views and sounds of the football game from various perspectives.

10 One of the video signals and one of the audio signals are usually selected at a television station to form a combined audio/video signal. This signal is then modulated and transmitted so that users having a television can receive the signal via the television. The television demodulates the combined signal and displays an image defined by the video signal on a display screen and reproduces the sounds defined by the audio signal via speakers. Therefore, the sights 15 and sounds of the game can be viewed and heard via the television.

However, spectators viewing and/or hearing the sights and sounds of the game via 20 televisions are not usually given the opportunity to select which video and/or audio signals are modulated and transmitted to the television. Therefore, the spectator is only able to receive the signals modulated and transmitted to the television, even though the spectator may prefer to receive the other signals that are generated at the game.

Spectators who actually attend the sporting event are usually given more options to view and/or hear the sights and sounds of the sporting event from different perspectives. In this regard, one or more monitors are sometimes located at one or more locations in the stadium.

Each monitor within the stadium receives one of the aforementioned video signals and displays an image defined by the received video signal to many of the spectators. However, the monitor does not always display a desirable perspective with respect to each spectator in the stadium, and the monitor is often not located in a convenient location for many of the spectators. In this 5 regard, many of the spectators often must leave their seats (or other locations) in the stadium and go to a location where the spectators, along with other spectators, can view the monitor displaying the desired perspective. The spectators viewing the monitor often do not have control over which image is displayed by the monitor.

Thus a heretofore unaddressed need exists in the industry for providing a system and 10 method that enables a spectator to conveniently view an event from different perspectives.

SUMMARY OF THE INVENTION

The present invention overcomes the inadequacies and deficiencies of the prior art as discussed hereinbefore. Generally, the present invention provides a system and method for 15 providing a user with a plurality of audio and video signals defining different sounds and views associated with an event.

The present invention includes a handheld device having a video receiver, a virtual image display device, and one or more speakers. The virtual image display device produces virtual 20 visual images based on received video signals, and the speakers produce sounds based on the received audio signals. As a result, the user may hear the sounds produced by the speakers and may see the video images produced by the display device by holding the handheld device to the user's face, or the user may watch the event live by removing the handheld device from the user's face.

In accordance with another feature of the present invention, the handheld device incorporates an integrated light shield/shroud to block ambient light that can interfere with the user's ability to view the virtual image. Unlike individual eye shrouds characteristic of a pair of optical binoculars, the present shroud shields both eyes at the same time. Among other 5 advantages, the present shroud enables the user to operate the device while wearing eyeglasses or sunglasses.

Other features and advantages of the present invention will become apparent to one skilled in the art upon examination of the following detailed description, when read in conjunction with the accompanying drawings. It is intended that all such features and 10 advantages be included herein within the scope of the present invention and protected by the claims.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention can be better understood with reference to the following drawings. The 15 elements of the drawings are not necessarily to scale relative to each other, emphasis instead being placed upon clearly illustrating the principles of the invention. Furthermore, like reference numerals designate corresponding parts throughout the several views.

FIG. 1 is a block diagram illustrating a video/audio receiving system in accordance with the present invention.

20 FIG. 2 is a block diagram illustrating more detailed view of a virtual image display system depicted in FIG. 1.

FIG. 3 is a three dimensional side view of an exemplary handheld device for implementing the video/audio receiving system of FIG. 1.

FIG. 4 is a top view of the exemplary handheld device depicted in FIG. 3.

FIG. 5 is a three dimensional front view of the exemplary handheld device depicted in FIG. 3.

5

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

A preferred embodiment of the present invention will be described hereafter in the context of football game applications. However, the scope of the present invention should not be so limited, and it should be apparent to one skilled in the art that the principles of the present invention may be employed in the context of other applications, particularly in the context of other sporting events (e.g., auto races, basketball games, baseball games, hockey matches, *etc.*).

10 FIG. 1 depicts a video/audio receiving system 12 implementing the principles of the present invention. At least one video signal 14 and at least one audio signal 15 are received by a receiver 16. Each of the video signals 14 defines a view of the event from a different perspective. For example, the video signals 14 may be generated by different video cameras located at different locations around the stadium. Furthermore, each of the audio signals 15 defines different sounds associated with the game. For example, at least one of the audio signals 15 may be generated from a microphone located close to the sideline of the game or in one of the helmets of one of the players of the game such that the audio signal defines sounds from the participants in the game. Alternatively, at least one of the audio signals 15 may define the 15 comments of television commentators, and at least one of the audio signals 15 may define the comments of radio commentators.

20

In particular, at least one of the audio and one of the video signals may be transmitted as a single combined signal from an audio/video system described in U.S. patent application

09/322,411 entitled "Video/Audio System and Method Enabling a User to Select Different Views and Sounds Associated With an Event." Additionally, one or more of the video and/or audio signals may be wireless, in which case, the interface 18 may comprise an antenna for receiving the wireless signals. However, various other types of signal interfaces 18 are possible.

5 For example, the signal interface 18 may be a cable or other type of signal transmission apparatus. Any type of wireless and/or non-wireless technique may be used to transmit signals to the video and audio receiver 16 via the signal interface 18.

Some of the audio and video signals 15 and 14 can be unmodulated when transmitted to the receiver 16 through the signal interface 18 and, therefore, do not need to be demodulated by the system 12. However, some of the audio signals 15 and/or video signals 14 may be modulated when received by the receiver 16 and, therefore, may need to be demodulated by the system 12. For example, at least one of the audio signals 15 defining the comments of the radio commentators may be modulated as a radio signal for transmission to radios located at or away from the stadium, and at least one of the video signals 14 may be modulated as a television signal for transmission to televisions located at or away from the stadium. Therefore, as shown by FIG. 1, the system 12 preferably includes a demodulator 20 configured to demodulate any modulated audio signals 15 and/or video signals 14 received by the receiver 16 through the signal interface 18.

Once demodulated, if necessary, the audio and video signals 15 and 14 are processed by 20 signal processing logic 22, which selects and conditions the signals 15 and 14. More specifically, the signal processing logic 22 selects, based on inputs from the user, one of the audio signals 15 and one of the video signals 14. Note that the logic 22 may be implemented via hardware, software, or a combination thereof. Further, the logic 22 may include one or more

filters for filtering out the unselected signals 15 and 14. After selecting one of the audio and video signals 15 and 14, the logic 22 conditions the selected video signals 15 so that they are compatible with the virtual image display system 30, and the logic 22 conditions the selected audio signals 15 so that they are compatible with the speakers 34. The logic 22 then transmits 5 the conditioned audio signals 15 to the speakers 34, which converts the conditioned audio signals 15 into sound. The logic 22 also transmits the conditioned video signals 14 to the virtual image display system 30, which displays the image defined by the conditioned video signals 14 according to techniques known in the art. Note that the processing performed by the signal processing logic 22 may be similar to or identical to the processing performed by the system in 10 U.S. patent application 09/322,411 entitled "Video/Audio System and Method Enabling a User to Select Different Views and Sounds Associated With an Event."

15 An input device 24, which may comprise one or more buttons knobs, dials, or other types of switches, may be used to provide the inputs for the processing performed by the processing logic 22. By controlling the components of the input device 24, the user may control various aspects of the processing performed by the logic 22, including which video signals 14 20 are selected for viewing, as well as which audio signals 15 are heard and the volume of the audio signals 15.

25 FIG. 2 depicts an exemplary virtual image display system 30 that may be employed to implement the principles of the present invention. A processed video signal 14 is displayed onto a Liquid Crystal Display 34. The Liquid Crystal Display 34 may be lit from the back via a back light 36, with the light shining through the Liquid Crystal Display 34, creating an image on the other side of the Liquid Crystal Display 34. On the opposite side of the Liquid Crystal Display 34 from the back light 36, some distance from the Liquid Crystal Display 34, is a half-silvered

mirror 38. The half-silvered mirror 38 is set at an approximately forty-five degree angle from the Liquid Crystal Display 34. The image reflects off the half-silvered mirror 38 onto a separate curved mirror 40 set some distance away from the half-silvered mirror 38. The curved mirror 40 magnifies the virtual image. The magnified virtual image reflects off of the curved mirror 40, 5 back to the half-silvered mirror 38. The magnified virtual image passes through the half-silvered mirror 38 to a lens 42 located on the opposite side of the half-silvered mirror 38 from the curved mirror 40. The magnified virtual image passes through the lens 42, which focuses the magnified virtual image. When the handheld device 50 is held to the user's face and the user 44 looks into the lens 42, the magnified virtual image is observed by the user 44. The user 44 observes the 10 magnified virtual image as much greater in size than the actual size of the image on the Liquid Crystal Display 34, with said magnified virtual image appearing to the user 44 to be located several feet in front of the user 44. It should be noted that other embodiments of the virtual image display system 30 may be employed without departing from the principles of the present invention. For example, in some embodiments, a single prism can be used to replace 15 components 38, 110, and 112.

In the preferred embodiment, the receiver 16, signal processing logic 22, virtual display system 30, and speakers 34 are all embodied within a handheld device 50, which is discussed in further detail herein below. Note that the handheld device 50 may be comprised of a housing unit or a casing coupled to each of the components shown in FIG. 1. One or more of the 20 components may be housed within the casing. By utilizing a handheld device 50 for viewing video signals 14, the user's experience may be enhanced. For example, when a handheld device 50 is used to show a field view of the game from a camera located on another side of the stadium, the user 44 sees a similar view as spectators located in that portion of the stadium.

Because the handheld device 50 limits the user's peripheral view of the environment around him, the user 44 naturally focuses on the view provided by the handheld device 50. When the user 44 desires to view the game directly, the user may quickly lower the device 50 so that the user's view of the game is not obstructed by the device 50. The handheld device 50 may similarly 5 enhance a user's experience at other events, such as other sporting events, for example.

Furthermore, since the device 50 is handheld, the device 50 is easily portable, and the user 44 may carry the handheld device 50 with him and choose where he would like to view the images produced by the handheld device 50. Indeed, the user 44 may roam the stadium with the device 50 in hand while intermittently viewing the images and hearing the sounds produced by 10 the system 12. Furthermore, by manipulating buttons or other types of switches 56 in the user input 24, the user 44 may control which video signals 14 are displayed and which audio signals 15 are produced by the system 12. Accordingly, the handheld device 50 gives the user 44 more flexibility in how the user 44 observes and listens to the sporting event and, as a result, makes the event a more enjoyable experience.

15 Many different types of casings for the handheld device 50 may be employed to implement the present invention. FIGS. 3, 4 and 5 depict an exemplary handheld device 50.

As depicted in FIG. 3, the handheld device 50 includes a main component 52, containing the system 12 (FIG. 1) used to provide a virtual image to the user 44, as discussed hereinbefore. The handheld device 50 also includes a shroud 54 to block out ambient light. The shroud 54 is 20 adapted to receive the user's forehead and allows the handheld device 50 to be engaged with the user's forehead while the user 44 is wearing eyeglasses or sunglasses. As can be seen in FIG. 5, the shroud 54 is shaped and sized to completely cover the user's eyes, allowing the handheld device 50 to be held against the face and/or forehead comfortably and blocking ambient light.

Also as a result, there is an amount of space between the eye position of the user 44 and the lenses 42 which reside in front of the user's eyes sufficient to accommodate the user's eyeglasses, *e.g.*, about one inch or more (in one embodiment, about 25 mm).

As depicted in FIG. 4, one or more switches 56 can be placed on the outside of the handheld device 50 for manipulation by the user 44 when the handheld device 50 is held to the user's face and/or forehead. Such switches 56 may include a rocker switch used to provide control of a parameter which varies through a range, such as channel selection. Other items that could be controlled in this fashion include, but are not limited to, tint, hue or contrast of the image, image brightness, volume control and the like. A slider switch (not shown) can be used, *e.g.*, to select among discrete choices. For example, the slider switch (not shown) may be used to select left, right or no relative frame phasing, to select between stereo and non-stereoscopic views, *etc.* Other controls and/or indicators can also be used and can be mounted on various surfaces of the handheld device 50 of FIG. 4.

It should be noted that it is not necessary for the user 44 to keep the handheld device 50 within the stadium. In this regard, the audio and video signals 15 and 14 may be transmitted via satellites and/or communication networks to various locations around the world, and the user 44 may select the view he prefers the most from just about any location capable of receiving a video signal 14 and/or audio signal 15.

It should also be noted that the handheld device 50 may be retrieved from the user 44 after the user 44 is finished viewing the event so that the handheld device 50 can be provided to another spectator for another event at the stadium. Each user 44 may be charged a usage fee for the user's use of the handheld device 50. In some embodiments, payment of the fee may be required before the user 44 is provided with the device 50. In other embodiments, the device 50

may receive information, via signals 14 and/or 15 or otherwise, indicating whether the device 50 is authorized to produce sounds and images defined by the signals 14 and 15. In this embodiment, the device 50 is configured to produce such images and sounds only when authorized to do so, and such authorization should only be transmitted to the device 50 once the 5 user 44 of the device 50 has provided payment.

It should be emphasized that the above-described embodiments of the present invention, particularly, any "preferred" embodiments, are merely possible examples of implementations, merely set forth for a clear understanding of the principles of the invention. Many variations and modifications may be made to the above-described embodiment(s) of the invention without departing substantially from the spirit and principles of the invention. All such modifications and variations are intended to be included herein within the scope of the present invention and protected by the claims.

10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
3310
3311
3312
3313
3314
3315
3316
3317
3318
3319
3320
3321
3322
3323
3324
3325
3326
3327
3328
3329
3330
3331
3332
3333
3334
3335
3336
3337
3338
3339
3340
3341
3342
3343
3344
3345
3346
3347
3348
3349
3350
3351
3352
3353
3354
3355
3356
3357
3358
3359
33510
33511
33512
33513
33514
33515
33516
33517
33518
33519
33520
33521
33522
33523
33524
33525
33526
33527
33528
33529
33530
33531
33532
33533
33534
33535
33536
33537
33538
33539
33540
33541
33542
33543
33544
33545
33546
33547
33548
33549
33550
33551
33552
33553
33554
33555
33556
33557
33558
33559
33560
33561
33562
33563
33564
33565
33566
33567
33568
33569
33570
33571
33572
33573
33574
33575
33576
33577
33578
33579
33580
33581
33582
33583
33584
33585
33586
33587
33588
33589
33590
33591
33592
33593
33594
33595
33596
33597
33598
33599
335100
335101
335102
335103
335104
335105
335106
335107
335108
335109
335110
335111
335112
335113
335114
335115
335116
335117
335118
335119
335120
335121
335122
335123
335124
335125
335126
335127
335128
335129
335130
335131
335132
335133
335134
335135
335136
335137
335138
335139
335140
335141
335142
335143
335144
335145
335146
335147
335148
335149
335150
335151
335152
335153
335154
335155
335156
335157
335158
335159
335160
335161
335162
335163
335164
335165
335166
335167
335168
335169
335170
335171
335172
335173
335174
335175
335176
335177
335178
335179
335180
335181
335182
335183
335184
335185
335186
335187
335188
335189
335190
335191
335192
335193
335194
335195
335196
335197
335198
335199
335200
335201
335202
335203
335204
335205
335206
335207
335208
335209
335210
335211
335212
335213
335214
335215
335216
335217
335218
335219
335220
335221
335222
335223
335224
335225
335226
335227
335228
335229
335230
335231
335232
335233
335234
335235
335236
335237
335238
335239
335240
335241
335242
335243
335244
335245
335246
335247
335248
335249
335250
335251
335252
335253
335254
335255
335256
335257
335258
335259
335260
335261
335262
335263
335264
335265
335266
335267
335268
335269
335270
335271
335272
335273
335274
335275
335276
335277
335278
335279
335280
335281
335282
335283
335284
335285
335286
335287
335288
335289
335290
335291
335292
335293
335294
335295
335296
335297
335298
335299
335300
335301
335302
335303
335304
335305
335306
335307
335308
335309
335310
335311
335312
335313
335314
335315
335316
335317
335318
335319
335320
335321
335322
335323
335324
335325
335326
335327
335328
335329
335330
335331
335332
335333
335334
335335
335336
335337
335338
335339
335340
335341
335342
335343
335344
335345
335346
335347
335348
335349
335350
335351
335352
335353
335354
335355
335356
335357
335358
335359
335360
335361
335362
335363
335364
335365
335366
335367
335368
335369
335370
335371
335372
335373
335374
335375
335376
335377
335378
335379
335380
335381
335382
335383
335384
335385
335386
335387
335388
335389
335390
335391
335392
335393
335394
335395
335396
335397
335398
335399
335400
335401
335402
335403
335404
335405
335406
335407
335408
335409
335410
335411
335412
335413
335414
335415
335416
335417
335418
335419
335420
335421
335422
335423
335424
335425
335426
335427
335428
335429
335430
335431
335432
335433
335434
335435
335436
335437
335438
335439
335440
335441
335442
335443
335444
335445
335446
335447
335448
335449
335450
335451
335452
335453
335454
335455
335456
335457
335458
335459
335460
335461
335462
335463
335464
335465
335466
335467
335468
335469
335470
335471
335472
335473
335474
335475
335476
335477
335478
335479
335480
335481
335482
335483
335484
335485
335486
335487
335488
335489
335490
335491
335492
335493
335494
335495
335496
335497
335498
335499
335500
335501
335502
335503
335504
335505
335506
335507
335508
335509
335510
335511
335512
335513
335514
335515
335516
335517
335518
335519
335520
335521
335522
335523
335524
335525
335526
335527
335528
335529
335530
335531
335532
335533
335534
335535
335536
335537
335538
335539
335540
335541
335542
335543
335544
335545
335546
335547
335548
335549
335550
335551
335552
335553
335554
335555
335556
335557
335558
335559
335560
335561
335562
335563
335564
335565
335566
335567
335568
335569
335570
335571
335572
335573
335574
335575
335576
335577
335578
335579
335580
335581
335582
335583
335584
335585
335586
335587
335588
335589
335590
335591
335592
335593
335594
335595
335596
335597
335598
335599
3355100
3355101
3355102
3355103
3355104
3355105
3355106
3355107
3355108
3355109
3355110
3355111
3355112
3355113
3355114
3355115
3355116
3355117
3355118
3355119
3355120
3355121
3355122
3355123
3355124
3355125
3355126
3355127
3355128
3355129
3355130
3355131
3355132
3355133
3355134
3355135
3355136
3355137
3355138
3355139
3355140
3355141
3355142
3355143
3355144
3355145
3355146
3355147
3355148
3355149
3355150
3355151
3355152
3355153
3355154
3355155
3355156
3355157
3355158
3355159
3355160
3355161
3355162
3355163
3355164
3355165
3355166
3355167
3355168
3355169
3355170
3355171
3355172
3355173
3355174
3355175
3355176
3355177
3355178
3355179
3355180
3355181
3355182
3355183
3355184
3355185
3355186
3355187
3355188
3355189
3355190
3355191
3355192
3355193
3355194
3355195
3355196
3355197
3355198
3355199
3355200
3355201
3355202
3355203
3355204
3355205
3355206
3355207
3355208
3355209
3355210
3355211
3355212
3355213
3355214
3355215
3355216
3355217
3355218
3355219
3355220
3355221
3355222
3355223
3355224
3355225
3355226
3355227
3355228
3355229
3355230
3355231
3355232
3355233
3355234
3355235
3355236
3355237
3355238
3355239
3355240
3355241
3355242
3355243
3355244
3355245
3355246
3355247
3355248
3355249
3355250
3355251
3355252
3355253
3355254
3355255
3355256
3355257
3355258
3355259
3355260
3355261
3355262
3355263
3355264
3355265
3355266
3355267
3355268
3355269
3355270
3355271
3355272
3355273
3355274
3355275
3355276
3355277
3355278
3355279
3355280
3355281
3355282
3355283
3355284
3355285
3355286
3355287
3355288
3355289
3355290
3355291
3355292
3355293
3355294
3355295
3355296
3355297
3355298
3355299
3355300
3355301
3355302
3355303
3355304
3355305
3355306
3355307
3355308
3355309
3355310
3355311
3355312
3355313
3355314
3355315
3355316
3355317
3355318
3355319
3355320
3355321
3355322
3355323
3355324
3355325
3355326
3355327
3355328
3355329
3355330
3355331
3355332
3355333
3355334
3355335
3355336
3355337
3355338
3355339
3355340
3355341
3355342
3355343
3355344
3355345
3355346
3355347
3355348
3355349
3355350
3355351
3355352
3355353
3355354
3355355
3355356
3355357
3355358
3355359
3355360
3355361
3355362
3355363
3355364
3355365
3355366
3355367
3355368
3355369
3355370
3355371
3355372
3355373
3355374
3355375
3355376
3355377
3355378
3355379
3355380
3355381
3355382
3355383
3355384
3355385
3355386
3355387
3355388
3355389
3355390
3355391
3355392
3355393
3355394
3355395
3355396
3355397
3355398
3355399
3355400
3355401
3355402
3355403
3355404
3355405
3355406
3355407
3355408
3355409
3355410
3355411
3355412
3355413
3355414
3355415
3355416
3355417
3355418
3355419
3355420
3355421
3355422
3355423
3355424
3355425
3355426
3355427
3355428
3355429
3355430
3355431
3355432
3355433
3355434
3355435
3355436
3355437
3355438
3355439
3355440
3355441
3355442
3355443
3355444
3355445
3355446
3355447
3355448
3355449
3355450
3355451
3355452
3355453
3355454
3355455
3355456
3355457
3355458
3355459
3355460
3355461
3355462
3355463
3355464
3355465
3355466
3355467
3355468
3355469
3355470
3355471
3355472
3355473
3355474
3355475
3355476
3355477
3355478
3355479
3355480
3355481
3355482
3355483
3355484
3355485
3355486
3355487
3355488
3355489
3355490
3355491
3355492
3355493
3355494
3355495
3355496
3355497
3355498
3355499
3355500
3355501
3355502
3355503
3355504
3355505
3355506
3355507
3355508
3355509
3355510
3355511
3355512
3355513
3355514
3355515
3355516
3355517
3355518
3355519
3355520
3355521
3355522
3355523
3355524
3355525
3355526
3355527
3355528
3355529
3355530
3355531
3355532
3355533
3355534
3355535
3355536
3355537
3355538
3355539
3355540
3355541
3355542
3355543
3355544
3355545
3355546
3355547
3355548
3355549
3355550
3355551
3355552
3355553
3355554
3355555
3355556
3355557
3355558
3355559
3355560
3355561
3355562
3355563
3355564
3355565
3355566
3355567
3355568
3355569
3355570
3355571
3355572
3355573
3355574
3355575
3355576
3355577
3355578
3355579
3355580
3355581
3355582
3355583
3355584
3355585
3355586
3355587
3355588
3355589
3355590
3355591
3355592
3355593
3355594
3355595
3355596
3355597
3355598
3355599
33555100
33555101
33555102
33555103
33555104
33555105
33555106
335551